TWO NEW SPECIES OF THE GENUS *ACCOLA* (ARANEAE, DIPLURIDAE)*

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Up to the present time six species of the Genus *Accola* Simon have been described from parts of South America, Central America and the West Indies. One of these, *A. spinosa* Petrunkevitch, has been known from both sexes since 1945; two of the others described by Simon are known only from immature specimens; the remaining three species are known only from females, which have very few distinguishing features. Dr. Petrunkevitch (1929) described a mature female of the genus *Accola* from Puerto Rico and considered it to belong to the species he originally described from Panama. Since the publication of my brief paper on *A. spinosa* Petrunkevitch (1945) and of the description of a male for the first time, I have collected a considerable number of specimens of this genus, from Panama, Jamaica and Puerto Rico. It is now quite clear that the Puerto Rican species is not the same as the species common in Panama and that the species from Jamaica appears to be quite different from other known species. Dr. Petrunkevitch stated that the Puerto Rican species had been taken with a sweeping net but I have taken all of my numerous specimens from debris of one kind or another by shaking or sifting. In order to bring our knowledge of this genus up to date I have thought it worth while to publish descriptions of these new species, both containing males and females. The types will be deposited in the Museum of Comparative Zoology at Harvard University. Female paratypes will also be deposited in the American Museum of Natural History and in the Museum of the Institute of Jamaica, Kingston, Jamaica, W. I.

At this time I wish to express my appreciation to the National Science Foundation for Grant No. GB-1801, which made it possible for me to collect in the West Indies and Panama for seven months. The grant also provides assistance for a period of study on my collections in the Museum of Comparative Zoology. My gratitude and appreciation are also again expressed for the priviledge of working in the Museum of Comparative Zoology at repeated intervals over a period of many years. Publication and library privileges together with continued encouragement from directors and staff members have been indispensable for the continuation of my studies.

Manuscript received by the editor, October 23, 1964.

Genus *Accola* Simon, 1889

Accola petrunkevitchi sp. nov.

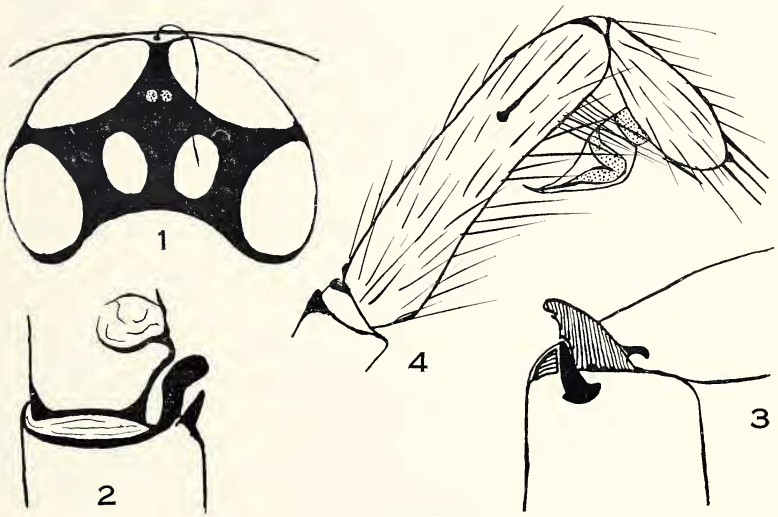
Figures 1-4

Accola spinosa,-Petrunkevitch, 1929. Not *A. spinosa* Petrunkevitch, 1925.

The species is named after Dr. Alexander Petrunkevitch, noted arachnologist, former teacher, and always a source of inspiration.

Male holoype. Total length from clypeus to posterior end of abdomen 3.9 mm; from anterior border of porrect chelicerae to posterior end of abdomen 4.16 mm. Carapace 1.69 mm long; 1.3 mm wide opposite second coxae where it is widest; .39 mm tall and, therefore, about three-tenths as tall as wide; cephalic part rises gently from ocular tubercle to dorsal fovea; opposite third coxae the posterior declivity begins and declines to broad posterior border; dorsal fovea a well defined pit opposite interval between second and third coxae; dorsal striae only moderately well indicated; broad posterior end supplied with a row of long, stiff, erect bristles; numerous stiff bristles over surface largely removed by handling.

Eyes. Eight in two rows essentially as in *A. spinosa* Pet. except that AME are very minute and, apparently, in close contact medially (Fig. 1); all on a moderately well developed tubercle.



Figures 1-4, *A. petrunkevitchi*, n. sp.

Fig. 1. Eyes of male, seen from above. Fig. 2. Spines and associated parts at articulation of left first tibia and metatarsus of male, seen from above. Fig. 3. The same as seen in prolateral view. Fig. 4. Left palpal tibia and tarsus of male; prolateral view.

Viewed from above, posterior row strongly recurved, anterior row strongly procurved. Some irregularity in form and size of corresponding eyes has been noted among paratypes. Ratio of eyes AME : ALE : PME : PLE = 1 : 10 : 5.5 : 8.5. AME darkened and difficult to measure with accuracy; all others white. AME appear to be in contact medially; well separated from ALE. PME separated from one another by about one third of their width, from PLE by about their width. PLE separated from one another behind by slightly more than their length. Width of clypeus equal to one fourth of the long diameter of ALE. Long diameters of eyes used for measurements unless otherwise stated.

Chelicerae. Paraxial, parallel, porrect as usual in the genus; fairly robust; clothed with a thick coat of stiff, procurved bristles. Fang long, slender, evenly curved; promargin of fang groove with eleven teeth, the last five considerably longer than others, together with several long, slender hairs; the retromargin has a well developed scopula of long, slender hairs.

Lip and *Sternum.* Essentially as described for *A. spinosa* Pet.

Legs. 4123. Tibial index of first leg 10; of fourth leg 12.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
			(All measurements in mm.)			
1.	1.41	.84	1.25	.99	.81	5.30
2.	1.13	.66	.88	.88	.66	4.21
3.	1.10	.55	.77	.95	.62	3.99
4.	1.50	.66	1.28	1.32	.79	5.55
Palp	.92	.55	.88	——	.48*	2.63

* Not including terminal spines.

Spines. In general the legs are well supplied with ordinary spines; legs one and two with many fewer than legs three and four. Detailed statement of number and position of ordinary spines not regarded as necessary for adequate description of the species. Special spines at articulation of first tibia and metatarsus as shown in Figures 2 and 3 should be noted. Numerous trichobothria have been noted but many are broken off from handling and the specific number and placements have not been determined.

Palp. Essential features shown in Figure 4. Coxa with a rudimentary maxillary lobe bearing a chitinized ridge which, in one view, appears like a small tooth.

Abdomen and *Color in alcohol.* Both essentially as described for *A. spinosa* Pet.

Female allotype. Dr. Petrunkevitch (1929) gave a description of what was probably a mature female of this species and for this

reason only those features which are not in agreement with that description will be given here. Total length from anterior border of porrect chelicerae to posterior end of abdomen 5.07 mm. Ratio of eyes AME : ALE : PME : PLE = 1? : 9 : 5 : 8. AME asymmetrically placed and so darkened that measurement is difficult. Not only procumbent hair on carapace but also long, stiff bristles arranged in somewhat irregular rows. Promargin of fang groove with twelve teeth; retromargin with a row of minute nodules at distal end. Fourth coxae separated by nearly one half their width. From genital groove anteriorly the abdomen is thickened, considerably raised and more strongly chitinized thus accentuating the genital area but yet without a definite epigynum.

Type locality. The male holotype is from a university farm a short distance east of the campus of the University of Puerto Rico at Mayaguez, P. R.; taken January 15, 1964. The allotype female was taken in a woody area near the Nuclear Center just east of the same university campus, January 27, 1964. I now have more than thirty specimens belonging to this species. Nearly all of these were collected in the vicinity of Mayaguez, P. R. or at the El Yunque Biological Station where the species appeared to be quite common. Three of the specimens are mature males but all of the rest are females or immature individuals and all were taken from various types of debris during the months of January and February, 1964.

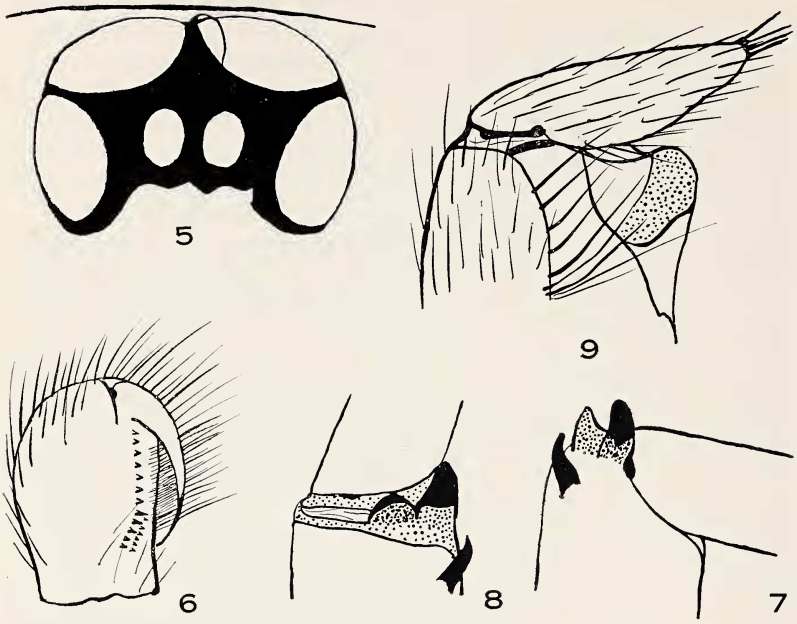
Accola lewisi sp. nov.

Figures 5-9

This species is named after Mr. C. Bernard Lewis, Director of The Institute of Jamaica, Kingston, Jamaica, W. I.

Male holotype. Total length from anterior border of porrect chelicerae to posterior end of abdomen 3.33 mm. Carapace 1.34 mm long; 1.04 mm wide opposite second coxae where it is widest; .26 mm tall and, therefore, about one fourth as tall as wide. Other features essentially as described for *A. petrunkevitchi* sp. nov.

Eyes. In this species I have been unable to find any indication of the AME as found in the other two species directly known to me. Viewed from above, posterior row strongly recurved as usual. All eyes white. Ratio of eyes ALE : PME : PLE=7.5 : 3.5 : 6.5 (considerable irregularity in shape noted). ALE separated from one another by slightly more than one fourth of their diameter. PLE separated from one another behind by about 1.5 times their diameter (Fig. 5). PME separated from one another by slightly more than one fourth of their diameter. Long diameters are always used for



Figures 5-9, *A. lewisi*, n. sp.

Fig. 5. Eyes of male: dorsal view. Fig. 6. Left chelicera of female, seen from below. Fig. 7. Spines at articulation of left first tibia and metatarsus of male; prolateral view. Fig. 8. The same as seen from above. Fig. 9. Left palpal tibia and tarsus of male; prolateral view.

measurements unless otherwise stated. Width of clypeus equal to slightly less than one half the diameter of ALE.

Chelicerae. Promargin of fang groove appears to have eleven teeth of moderate size; the retromargin has a row of about six very small, slender and closely crowded teeth opposite the last four or five promarginal teeth. Otherwise essentially as described for *A*. petrunkevitchi sp. nov.

Lip and *Sternum*. Essentially as described for *A. spinosa* Pet.

Legs. 4123. Tibial index of first leg 9, of fourth leg 11.

(All measurements in mm)

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
1.	1.19	.75	1.10	.66	.55	4.25
2.	.95	.55	.66	.62	.53	3.31
3.	.88	.44	.57	.70	.44	3.03
4.	1.19	.55	1.02	.99	.66	4.41
Palp	.81	.55	.68	—	.35	2.39

Spines. Essentially as described for *A. petrunkevitchi* sp. nov. Detailed statement of number and position of ordinary spines not regarded as essential for adequate description of the species. The special spines at the articulation of the first tibia and metatarsus (Figs. 7-8) should be noted.

Palp. Essential features shown in Figure 9. Measurements of segments shown in table. There are close similarities among all three species well known to me but, nevertheless, there are specific differences and these, I think, can best be shown by drawings.

Abdomen. Somewhat distorted but essentially as described for *A. spinosa* Pet. (Chickering, 1945).

Color in alcohol. Also essentially as described for *A. spinosa* Pet.

Female allotype. Total length from anterior border of porrect chelicerae to posterior end of abdomen 4.42 mm. Carapace 1.43 mm. long, 1.11 mm. wide opposite second coxae where it is widest, .46 mm. tall and, therefore, about two fifths as tall as wide.

Eyes. Essentially as in male.

Chelicerae. Promargin of fang groove with a row of twelve small teeth (Fig. 6); the retromargin with a row of six minute teeth nearly opposite the last four promarginal teeth; retromarginal teeth well developed.

Lip and *Sternum.* The sternum is abruptly raised a short distance medial to the border thus making what appears to be a depressed border surrounding this part of the body except for the portion contiguous to the lip. Otherwise essentially as in male.

Legs. 4123. Tibial index of first leg 11, of fourth leg 13.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
1.	1.10	.66	.90	.67	.55	3.88
2.	.88	.53	.60	.55	.53	3.09
3.	.88	.47	.53	.65	.50	3.03
4.	1.06	.55	.97	.90	.62	4.10

Spines. Present in small numbers on legs one and two; present in large numbers on legs three and four. Detailed statement of numbers and positions of spines regarded as unnecessary for adequate description of the species.

Abdomen. Essentially as described for *A. spinosa* Pet. (Chickering, 1945).

Color in alcohol. Essentially as I have described for other species with which I am directly acquainted.

Type locality. The male holotype and the female allotype were both taken in St. Catherine Parish, Jamacia, W. I. two miles west of the junction of Red Hills Road and the highway to Spanishtown

on October 1, 1957. One male paratype was taken in St. Andrew Parish, two miles north of Papine on May 19th, 1956 (C. C. Hoff). I have numerous females and immature individuals from many localities in Jamaica, W. I., and I believe all of these have been taken from debris of some kind.

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